

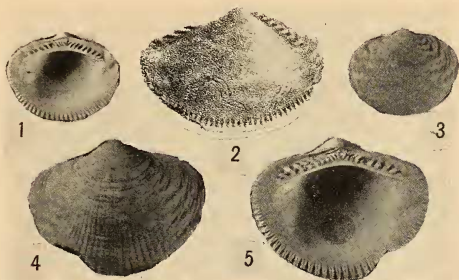
561486 and 13 other specimens in U. S. N. M. Collection with nos. 561483, 561485, 561487, 561488, 561489.

REFERENCES

COOKE, C. WYTHE. *Geology of the Coastal Plain*

of South Carolina. U. S. Geol. Surv. Bull. 867: 196 pp. 1936.

TUOMEY, M., and HOLMES, F. S. *Pleiocene fossils of South-Carolina: containing descriptions and figures of the Polypteria, Echinodermata and Mollusca*: 152 pp., 30 pls. Charleston, S. C., 1855-1857.



FIGS. 1-5.—*Glycymeris aberrans*: 1, Interior view and 3, exterior view, right valve, hypotype U. S. N. M. no. 561484; 2, internal cast, copied from Tuomey and Holmes, 1856, pl. 17, fig. 6c; 4, exterior view and 5, interior view, right valve, hypotype U. S. N. M. no. 561486. All figures natural size. Hypotypes from U. S. G. S. loc. no. 15112, 19 miles west of Miami, Dade County, Fla. Tuomey and Holmes's specimen from U. S. G. S. loc. no. 10412, Smith's Goose Creek, Berkeley County, S. C.

ENTOMOLOGY.—*Notes on synonymy in Siphonaptera*. G. H. E. HOPKINS, British Museum (Natural History). (Communicated by C. F. W. Muesebeck.)

In the course of preparing a catalogue of the N. C. Rothschild collection of fleas a few instances have come to light in which names currently accepted as referring to the same taxonomic unit actually apply to different units, and many more in which names believed to refer to separate units are synonyms. The volume dealing with the Pulicoidea is now in the press, and it is hoped that it will be published this year, but it seems desirable to put on record some of the other hitherto-unpublished instances in which the accepted placing of a taxonomic unit appears to be incorrect. Unless stated otherwise, all instances in which changes in the placing of species and subspecies are suggested are based on examination of specimens, commonly types or paratypes. With regard to genera, which are subjective units and not objective, there are two courses which can be adopted if two apparently natural groups of species differ by characters apparently of little phylogenetic significance, and the choice between

them seems to be mainly a matter of convenience. Obviously a difference in phylogenetically important characters must be recognized by generic separation, but where this is not the case it seems to me to be better to emphasize the resemblances between the two groups than their differences unless considerations of convenience force one to snatch at any chance of breaking up an unwieldy group. Where, therefore, a small group has been broken up into subgenera on phylogenetically unimportant characters I can see little advantage in retaining this arrangement, whereas if the same thing has happened in a large group convenience dictates accepting it. This is, for instance, the case in the *Rhadinopsyllinae*, where I have grave doubts whether *Rhadinopsylla* and *Rectofrontia* are really generically separable or even whether they are entirely natural groups, but have kept them separate because the group would otherwise be so inconveniently large.

Apart from instances of synonymy at-

tributed below to other workers who have kindly informed me about them, there are many other instances in which a particular synonymy has been suggested to me as probable by some other worker (especially G. P. Holland) and confirmed by me; I have not thought it necessary to make a specific acknowledgment in such instances, because the final responsibility for such synonymies is mine.

Family COPTOPSYLLIDAE

Neocoptosylla Wagner, 1932 = *Coptosylla* Jordan and Rothschild, 1908. Admittedly the type species, *N. wassiliewi* Wagner, is a good deal more distinct from the other species than these are from one another, but its characteristics do not seem to merit generic rank and its retention as a subgenus would serve no particularly useful purpose in so small a group as *Coptosylla*.

Coptosylla lamellifer fallax Ioff and Tiflov, 1934 = *C. lamellifer ardua* Jordan and Rothschild, 1915. The fact that the latter name was based on males whose characteristics were altered by parasitic castration in no way affects its validity.

Family VERMIPSYLLIDAE

Arctopsylla Wagner, 1930, is extremely difficult to separate from *Chaetopsylla* Kohaut, 1903, because the two characters that have been used to define it (the permanent, instead of deciduous, frontal tubercle and the number of segments in the labial palp) do not always go together. Provisionally I accept it as a subgenus of *Chaetopsylla* and refer to it those species in which the frontal tubercle is permanent.

Pulex ursi Rothschild, 1902 = *Chaetopsylla* (*Arctopsylla*) *tuberculiceps ursi* (Rothschild).

Vermipsylla strandi Wahlgren, 1903 = *Chaetopsylla* (*A.*) *tuberculiceps* (Bezzi), 1890.

Family LEPTOPSYLLIDAE

Ctenopsyllus fallax Rothschild, 1902 = *Peromyscopsylla silvatica fallax* (Rothschild).

Typhlopsylla spectabilis Rothschild, 1898 = *Peromyscopsylla silvatica spectabilis* (Rothschild).

Pectinotenus adalis Jordan, 1929 = *Pectinotenus pectiniceps* (Wagner), 1893.

Family ISCHNOPSYLLIDAE

Ischnopsyllus noctilionis Costa Lima, 1920 (referred by Pinto, 1930, to *Hormopsylla*) be-

longs to neither of these genera but is almost certainly a *Ptilopsylla*. No specimens have been available, but Dr. Costa Lima has kindly provided photo-micrographs of the holotype.

Aptilopsylla carlsbadensis Ewing, 1940 = *Sternopsylla texana* (C. Fox), 1914 (information kindly supplied by Lt. Col. R. Traub).

Eptesopsylla I. Fox, 1940 = *Nycteridopsylla* Oudemans, 1906.

Nycteridopsylla eusarca major Rothschild, 1909 = *Nycteridopsylla eusarca* Dampf, 1908. In 1949 (Entomologist 82: 134-136) I placed *eusarca* as a synonym of *Nycteridopsylla pungens* (Walckenaer), 1802, and I still think that this is probably correct. But there is a certain element of doubt in the matter and in any case Walckenaer's name has not been used (except on this one occasion) for very many years. I therefore intend to ask the International Commission on Zoological Nomenclature to suppress the name *Pulex pungens* Walckenaer, 1802, and pending their decision I intend to revert to calling the flea *N. eusarca* Dampf.

Myodopsylloides Augustson, 1941 = *Myodopsylla* Jordan and Rothschild, 1911.

Myodopsylla notialis Jordan, 1937 = *Myodopsylla wolffsohni wolffsohni* (Rothschild), 1903.

Ischnopsyllus liui Chao, 1947 = *Ischnopsyllus* *liae* Jordan, 1941.

Ischnopsyllus tateishii Sugimoto, 1933 = *Ischnopsyllus indicus* Jordan, 1931.

Ischnopsyllus ashworthii Waterston, 1913 = *Rhinolophopsylla ashworthi* (Waterston).

Ischnopsyllus ectopus Jordan, 1937 = *Rhinolophopsylla ectopa* (Jordan).

Family HYPSPHthalmidae

Chiastopsylla numae klaveriana De Meillon, 1940 = *Chiastopsylla numae* (Rothschild), 1904.

Chiastopsylla caffrarica De Meillon, 1940, and *C. crassus* De Meillon, 1940 = *C. rossi* (Waterston), 1909 (information kindly supplied by Dr. De Meillon).

Chiastopsylla couchae De Meillon, 1940 = *C. godfreyi* Waterston, 1913.

Family HYSTRICOPSYLLIDAE

Subfamily Hystrichopsyllinae

Pulex gigas Kirby, 1837, has been variously placed. Baker (1895) used the name for a species now referred to the Neopsyllinae; Rothschild (1915) thought it a *Stenoponia*; and Jordan (1929) considered it to be a *Hystrichopsylla*.

Baker's suggestion is certainly wrong, for the flea undoubtedly belongs to the Hystrihopsyllidae, but the description and figure are not good enough to make it possible to decide with any certainty whether it is a *Stenoponia* or a *Hystrihopsylla*, though the latter genus seems a little more likely than the former. The name should be discarded until topotypical specimens can be obtained.

Saphiopsylla Jordan, 1931 = *Athyloceras* Jordan and Rothschild, 1915, but could be recognized as a subgenus if this would serve any particular purpose.

Athyloceras artius Jordan, 1933, and *A. felix* Jordan, 1933 = *A. multidentatum* (C. Fox), 1909.

Subfamily Dinopsyllinae

Dinopsyllus lypusus Jordan and Rothschild, 1913 = *Dinopsyllus ellobius lypusus* Jordan and Rothschild.

Dinopsyllus tenax Jordan, 1930 = *D. longifrons tenax* Jordan.

Dinopsyllus semnus Jordan, 1937 = *D. hirsutus semnus* Jordan.

Subfamily Listropsyllinae

Ceratophyllus stygius Rothschild, 1908 = *Listropsylla dolosa* Rothschild, 1907.

Subfamily Rhadinopsyllinae

Corypsylla Hubbard, 1940 = *Corypsylla* C. Fox, 1908. It could be accepted as a subgenus, principally on the presence of pseudosetae under the collar of the metanotum, but there is little object in recognizing subgenera in a genus containing only three known species.

Corypsylla setosifrons Stewart, 1940 = *Corypsylla ornata* C. Fox, 1908 (information kindly supplied by Dr. E. W. Jameson).

Nearctopsylla hygini laurentina Jordan and Rothschild, 1923 = *N. g. genalis* (Baker), 1904.

Rhadinopsylla s.g. *Rangulopsylla* Darskaya, 1949 = *Rectofrontia* Wagner, 1930.

Actenophthalmus C. Fox, 1925, is at most a subgenus of *Rectofrontia* Wagner, 1930, and is provisionally recognized in that grade.

Micropsylla Ewing, 1938, is a subgenus of *Rectofrontia* Wagner, 1930.

Rhadinopsylla bureschi Jordan, 1929 = *Rectofrontia fraterna bureschi* (Jordan), *Rhadinopsylla casta* Jordan, 1928 = *Rectofrontia fraterna casta* (Jordan), and *Rhadinopsylla integella* Jordan and Rothschild, 1921 = *Rectofrontia fraterna integella* (Jordan and Rothschild). *Rhadinopsylla* (*Rectofrontia*) *integella concava* Ioff and Tiflov, 1946, and *R. (R.) integella pilosa* Ioff and Tiflov, 1946, of which specimens have not been available, are presumably also subspecies of *Rectofrontia fraterna* (Baker), 1895.

Micropsylla Dunn, 1923, is a subgenus of *Rectofrontia* Wagner, 1930.

Subfamily Anomiopsyllinae

Megarhoglossus procus oregonensis Hubbard, 1947 = *Megarhoglossus procus* Jordan and Rothschild, 1915.

Megarhoglossus divisus wallowensis Hubbard, 1947 = *Megarhoglossus divisus divisus* (Baker), 1898 (information kindly supplied by Lt. Col. Traub).

Anomiopsyllus congruens Stewart, 1940 = *Anomiopsyllus falsicalifornicus congruens* Stewart.

MYCOLOGY.—On the fungus genera *Titaea*, *Monogrammia*, and *Araneomyces*. S. C. DAMON,¹ Quartermaster Depot, Philadelphia, Pa. (Communicated by G. W. Martin.)

While studying genera of staurosporous Moniliaceae, a striking similarity between *Monogrammia miconiae*, *Araneomyces acariferus*, and species of *Titaea* was noted. In-

vestigation into all available information has led to the reduction of *Monogrammia* and *Araneomyces*, both monotypic genera, to the synonymy of *Titaea*, with the transfer of their species to that genus. In this connection, type material of *Titaea clarkeae* Ell. and Ev. (originally published as *T. clarkei*) has been re-examined, and it has been shown to be congeneric with other species assigned to the genus.

¹ I wish to express my appreciation to Dr. W. L. White, of the Farlow Herbarium, for the opportunity to study the type specimen of *Araneomyces acariferus*, and to Dr. Leland Shanor, of the University of Illinois, for his cooperation in searching for the type specimen of *Monogrammia miconiae* among the Stevens collections.